

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------|---------------|----------------------|-------------------------|------------------|
| 10/651,741 | 08/29/2003 | Glenn Wood | 10021108-1 | 9165 |
| 75 | 90 10/05/2006 | | EXAM | INER |
| AGILENT TECHNOLOGIES, INC. | | | ODOM, CURTIS B | |
| Legal Departme | | | Т | · |
| Intellectual Property Administration | | | ART UNIT | PAPER NUMBER |
| P.O. Box 7599 | | | 2611 | |
| Loveland, CO 80537-0599 | | | DATE MAILED: 10/05/2006 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| \$ |
|----|
| V |

| | Application No. | Applicant(s) | | | | |
|--|---|--------------|--|--|--|--|
| Office Action Summer | 10/651,741 | WOOD, GLENN | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Curtis B. Odom | 2611 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1)⊠ Responsive to communication(s) filed on 29 Au | iaust 2003. | | | | | |
| | action is non-final. | | | | | |
| <u> </u> | · | | | | | |
| .— ,, | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-17</u> is/are pending in the application. | | | | | | |
| , | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-5</u> is/are rejected. | | | | | | |
| 7)⊠ Claim(s) <u>6-17</u> is/are objected to. | · | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement | | | | | |
| · · · · · · · · · · · · · · · · · · · | oloolion roquiromoni. | | | | | |
| Application Papers | | | | | | |
| 9)⊠ The specification is objected to by the Examiner. | | | | | | |
| 10) $igtimes$ The drawing(s) filed on <u>29 August 2003</u> is/are: a) $igtimes$ accepted or b) $igsqcup$ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | • | • | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | ite | | | | |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: On page 7, line 29, "integral" is suggested to be changed to "integer".

Appropriate correction is required.

Claim Objections

- 2. Claims 1-17 are objected to because of the following informalities:
- a. In claim 1, line 1, the phrase "the response time" is suggested to be changed to "a response time".
- b. In claim 1, lines 6-7, the phrase "the frequency of the first signal line being higher than the frequency of the of the second signal line" is suggested to be changed to "a frequency of the first square wave being higher than the frequency of the second square wave". It is the understanding of the examiner that the frequencies of the square waves are different, not the frequency of the signal lines (see instant specification, page 6, lines 14-24).
- c. In claim 1, line 11, the phrase "the number of pulses" is suggested to be changed to "a number of pulses".
 - d. In claim 3, line 1, the phrase "the phase" is suggested to be changed to "a phase".

e. In claim 6, line 1, the phrase "the response time" is suggested to be changed to "a response time".

- f. In claim 6, line 9, "integral" is suggested to be changed to "integer".
- g. In claim 6, line 14, the phrase "the duty cycle" is suggested to be changed to "a duty cycle".
- h. In claim 9, line 1, the phrase "the number of pulses" is suggested to be "a number of pulses".
- i. In claim 12, line 1, the phrase "the response time" is suggested to be changed to "a response time".
 - j. In claim 12, line 9, "integral" is suggested to be changed to "integer".
- k. In claim 12, line 13, the phrase "the phase lag" is suggested to be changed to "a phase lag".
- l. In claim 12, line 14, the phrase "the duty cycle" is suggested to be changed to "a duty cycle".
- m. In claim 14, the phrase "the number of pulses" is suggested to be changed to "a number of pulses".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Application/Control Number: 10/651,741

Art Unit: 2611

3. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claims 1-5, claim 1 recites "A test system for measuring the response time of a squelch detection circuit...the test system comprising". However, claim 1, does not recite a component of the system or a function which "measures the response time of a squelch detection circuit". Thus, the claim does not define how the response time is measured by the test system. Therefore, one of ordinary skill in the art at the time the invention was made would not be able to measure the response time of a squelch detection circuit based on the recited claim.

Allowable Subject Matter

4. Claims 6-17 are allowable over prior art references (if above objections are overcome) because related references do not disclose measuring the response time of a squelch detection circuit over a differential signal pair by driving a first signal line with a first square wave having a period which is a multiple of a squelch state signal, driving a second signal line with a second square wave which is a multiple of the first square wave, reducing the period or phase lag of the square waves, until the duty cycle of a squelch detect signal is less than fifty percent, and calculating the response time from the period or phase lag of the first square wave after the reduction.

Application/Control Number: 10/651,741

Art Unit: 2611

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Deyring et al. (US 2003/0148801) discloses detecting a squelch state and measuring the time of the squelch state. Deyring et al. does not disclose measuring the response time of a squelch detection circuit over a differential signal pair by driving a first signal line with a first square wave having a period which is a multiple of a squelch state signal, driving a second signal line with a second square wave which is a multiple of the first square wave, reducing the period or phase lag of the square waves, until the duty cycle of a squelch detect signal is less than fifty percent, and calculating the response time from the period or phase lag of the first square wave after the reduction.

Tran (U. S. Patent No. 5, 418, 821), Yu (U. S. Patent No. 6, 859, 645), and Schoenbern (US 2003/0185308) discloses detecting squelch states of differential signal pairs.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis B. Odom whose telephone number is 571-272-3046. The examiner can normally be reached on Monday- Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Curtis Oddm

September 26, 2006